

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/822 953
Source: 1 FWO
Date Processed by STIC: 10/22/04

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RAW SEQUENCE LISTING

DATE: 10/22/2004

PATENT APPLICATION: US/10/822,953

TIME: 15:33:05

Input Set : A:\Amsc33cn.app

Output Set: N:\CRF4\10222004\J822953.raw

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3 <110> APPLICANT: MURPHY, JOHN R.
4     O'LEAR, EDWARD
5     HARRISON, ROBERT J.
7 <120> TITLE OF INVENTION: VACCINE COMPOSITIONS
9 <130> FILE REFERENCE: AMSC 3.3-001 CONT
11 <140> CURRENT APPLICATION NUMBER: 10/822,953
12 <141> CURRENT FILING DATE: 2004-04-12
14 <150> PRIOR APPLICATION NUMBER: 09/868,753
15 <151> PRIOR FILING DATE: 2001-06-21
17 <150> PRIOR APPLICATION NUMBER: PCT/US00/29231
18 <151> PRIOR FILING DATE: 2000-10-23
20 <150> PRIOR APPLICATION NUMBER: 60/161,292
21 <151> PRIOR FILING DATE: 1999-10-25
23 <150> PRIOR APPLICATION NUMBER: 60/161,193
24 <151> PRIOR FILING DATE: 1999-10-22
26 <160> NUMBER OF SEQ ID NOS: 36
28 <170> SOFTWARE: PatentIn Ver. 3.2
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 24
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
38 <400> SEQUENCE: 1
39 accagatctg ccgaaaaact tcga                                24
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 25
44 <212> TYPE: DNA
45 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:
48 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
50 <400> SEQUENCE: 2
51 accagatctc cgcctttagt attta                                25
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 27
56 <212> TYPE: DNA
57 <213> ORGANISM: Unknown Organism
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Description of Unknown Organism: Native tox
61     operator
63 <400> SEQUENCE: 3
64 ataattagga tagctttacc taattat                                27
67 <210> SEQ ID NO: 4

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68 <211> LENGTH: 19
69 <212> TYPE: DNA
70 <213> ORGANISM: Unknown Organism
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Description of Unknown Organism: Illustrative
74     polynucleotide target site
76 <400> SEQUENCE: 4
77 gtaggttagg ctaacctat                                     19
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 25
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus-binding
87     sequence
89 <220> FEATURE:
90 <221> NAME/KEY: modified_base
91 <222> LOCATION: (2)
92 <223> OTHER INFORMATION: a, t, c, g, unknown or other
94 <220> FEATURE:
95 <221> NAME/KEY: modified_base
96 <222> LOCATION: (4)
97 <223> OTHER INFORMATION: a, t, c, g, unknown or other
99 <220> FEATURE:
100 <221> NAME/KEY: modified_base
101 <222> LOCATION: (10)
102 <223> OTHER INFORMATION: a, t, c, g, unknown or other
104 <220> FEATURE:
105 <221> NAME/KEY: modified_base
106 <222> LOCATION: (14)
107 <223> OTHER INFORMATION: a, t, c, g, unknown or other
109 <220> FEATURE:
110 <221> NAME/KEY: modified_base
111 <222> LOCATION: (18)..(19)
112 <223> OTHER INFORMATION: a, t, c, g, unknown or other
114 <220> FEATURE:
115 <221> NAME/KEY: modified_base
116 <222> LOCATION: (22)..(25)
117 <223> OTHER INFORMATION: a, t, c, g, unknown or other
119 <400> SEQUENCE: 5
W--> 120 ananttaggn tagnctannnc tnnnn                                25
123 <210> SEQ ID NO: 6
124 <211> LENGTH: 19
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
130     variant polynucleotide sequence
132 <400> SEQUENCE: 6

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133 twaggttags ctaacctwa
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 230
138 <212> TYPE: PRT
139 <213> ORGANISM: Mycobacterium tuberculosis
141 <400> SEQUENCE: 7
142 Met Asn Glu Leu Val Asp Thr Thr Glu Met Tyr Leu Arg Thr Ile Tyr
143 1 5 10 15
145 Asp Leu Glu Glu Gly Val Thr Pro Leu Arg Ala Arg Ile Ala Glu
146 20 25 30
148 Arg Leu Asp Gln Ser Gly Pro Thr Val Ser Gln Thr Val Ser Arg Met
149 35 40 45
151 Glu Arg Asp Gly Leu Leu Arg Val Ala Gly Asp Arg His Leu Glu Leu
152 50 55 60
154 Thr Glu Lys Gly Arg Ala Leu Ala Ile Ala Val Met Arg Lys His Arg
155 65 70 75 80
157 Leu Ala Glu Arg Leu Leu Val Asp Val Ile Gly Leu Pro Trp Glu Glu
158 85 90 95
160 Val His Ala Glu Ala Cys Arg Trp Glu His Val Asn Ser Glu Asp Val
161 100 105 110
163 Glu Arg Arg Leu Val Lys Val Leu Asn Asn Pro Thr Thr Ser Pro Phe
164 115 120 125
166 Gly Asn Pro Ile Pro Gly Leu Val Glu Leu Gly Val Gly Pro Glu Pro
167 130 135 140
169 Gly Ala Asp Asp Ala Asn Leu Val Arg Leu Thr Glu Leu Pro Ala Gly
170 145 150 155 160
172 Ser Pro Val Ala Val Val Val Arg Gln Leu Thr Glu His Val Gln Gly
173 165 170 175
175 Asp Ile Asp Leu Ile Thr Arg Leu Lys Asp Ala Gly Val Val Pro Asn
176 180 185 190
178 Ala Arg Val Thr Val Glu Thr Thr Pro Gly Gly Gly Val Thr Ile Val
179 195 200 205
181 Ile Pro Gly His Glu Asn Val Thr Leu Pro His Glu Met Ala His Ala
182 210 215 220
184 Val Lys Val Glu Lys Val
185 225 230
188 <210> SEQ ID NO: 8
189 <211> LENGTH: 223
190 <212> TYPE: PRT
191 <213> ORGANISM: Corynebacterium diphtheriae
193 <400> SEQUENCE: 8
194 Met Lys Asp Leu Val Asp Thr Thr Glu Met Tyr Leu Arg Thr Ile Tyr
195 1 5 10 15
197 Glu Leu Glu Glu Gly Val Thr Pro Leu Arg Ala Arg Ile Ala Glu
198 20 25 30
200 Arg Leu Glu Gln Ser Gly Pro Thr Val Ser Gln Thr Val Ala Arg Met
201 35 40 45
203 Glu Arg Asp Gly Leu Val Val Val Ala Ser Asp Ser Leu Gln Met Thr
204 50 55 60

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206 Pro Thr Gly Arg Thr Leu Ala Thr Ala Val Met Arg Lys His Arg Leu
207 65 70 75 80
209 Ala Glu Arg Leu Leu Thr Asp Ile Ile Gly Leu Asp Ile Asn Lys Val
210 85 90 95
212 His Asp Glu Ala Cys Arg Trp Glu His Val Met Ser Asp Glu Val Glu
213 100 105 110
215 Arg Arg Leu Val Lys Val Lys Asp Val Ser Arg Ser Pro Phe Gly Asn
216 115 120 125
218 Pro Ile Pro Gly Leu Asp Glu Leu Gly Val Gly Asn Ser Asp Ala Ala
219 130 135 140
221 Ala Pro Gly Thr Arg Val Ile Asp Ala Ala Thr Ser Met Pro Arg Lys
222 145 150 155 160
224 Val Arg Ile Val Gln Ile Asn Glu Ile Phe Gln Val Glu Thr Asp Gln
225 165 170 175
227 Phe Gln Leu Leu Asp Ala Asp Ile Arg Val Gly Ser Glu Val Glu Ile
228 180 185 190
230 Val Asp Arg Asp Gly His Ile Thr Leu Ser His Asn Gly Lys Asp Val
231 195 200 205
233 Glu Leu Leu Asp Asp Leu Ala His Thr Ile Arg Ile Glu Glu Leu
234 210 215 220
237 <210> SEQ ID NO: 9
238 <211> LENGTH: 174
239 <212> TYPE: PRT
240 <213> ORGANISM: Staphylococcus epidermitis
242 <400> SEQUENCE: 9
243 Met Thr Val Ser Cys Pro Pro Pro Ser Thr Ser Glu Arg Glu Glu Gln
244 1 5 10 15
246 Ala Arg Ala Leu Cys Leu Arg Leu Leu Thr Ala Arg Ser Arg Thr Arg
247 20 25 30
249 Ala Glu Leu Ala Gly Gln Leu Ala Lys Arg Gly Tyr Pro Glu Asp Ile
250 35 40 45
252 Gly Asn Arg Val Leu Asp Arg Leu Ala Ala Val Gly Leu Val Asp Asp
253 50 55 60
255 Thr Asp Phe Ala Glu Gln Trp Val Gln Ser Arg Arg Ala Asn Ala Ala
256 65 70 75 80
258 Lys Ser Lys Arg Ala Leu Ala Ala Glu Leu His Ala Lys Gly Val Asp
259 85 90 95
261 Asp Asp Val Ile Thr Thr Val Leu Gly Gly Ile Asp Ala Gly Ala Glu
262 100 105 110
264 Arg Gly Arg Ala Glu Lys Leu Val Arg Ala Arg Leu Arg Arg Glu Val
265 115 120 125
267 Leu Ile Asp Asp Gly Thr Asp Glu Ala Arg Val Ser Arg Arg Leu Val
268 130 135 140
270 Ala Met Leu Ala Arg Arg Gly Tyr Gly Gln Thr Leu Ala Cys Glu Val
271 145 150 155 160
273 Val Ile Ala Glu Leu Ala Ala Glu Arg Glu Arg Arg Arg Val
274 165 170
277 <210> SEQ ID NO: 10
278 <211> LENGTH: 225

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279 <212> TYPE: PRT
280 <213> ORGANISM: Mycobacterium leprae
282 <400> SEQUENCE: 10
283 Met Asn Asp Leu Val Asp Thr Thr Glu Met Tyr Leu Arg Thr Ile Tyr
284   1           5           10           15
286 Asp Leu Glu Glu Glu Gly Ile Val Thr Pro Leu Arg Ala Arg Ile Ala
287           20           25           30
289 Glu Arg Pro Thr Val Ser Gln Thr Val Ser Arg Met Glu Arg Asp Gly
290           35           40           45
292 Leu Leu Arg Val Ala Gly Asn Arg His Leu Glu Leu Thr Thr Lys Gly
293           50           55           60
295 Arg Ala Met Ala Ile Ala Val Met Arg Lys His Arg Leu Ala Glu Arg
296   65           70           75           80
298 Leu Leu Val Asp Val Ile Gly Leu Pro Trp Glu Glu Val His Ala Glu
299           85           90           95
301 Ala Cys Arg Trp Glu His Val Met Ser Glu Asp Val Glu Arg Arg Leu
302           100          105          110
304 Ile Lys Val Leu Asn Asn Pro Thr Thr Ser Pro Phe Gly Asn Pro Ile
305           115          120          125
307 Pro Gly Leu Leu Asp Leu Gly Ala Gly Pro Asp Ala Ser Ala Ala Asn
308           130          135          140
310 Ala Lys Leu Val Arg Leu Thr Glu Leu Pro Ser Gly Ser Pro Val Ala
311  145          150          155          160
313 Val Val Val Arg Gln Leu Thr Glu His Val Asp Asp Ile Asp Leu Ile
314           165          170          175
316 Thr Arg Leu Lys Asp Thr Gly Val Val Pro Asn Ala Arg Val Thr Val
317           180          185          190
319 Glu Thr Ser Pro Ala Gly Asn Val Ile Ile Ile Ile Pro Gly His Glu
320           195          200          205
322 Asn Val Thr Leu Pro His Glu Met Ala His Ala Val Lys Val Glu Lys
323   210          215          220
325 Val
326 225
329 <210> SEQ ID NO: 11
330 <211> LENGTH: 230
331 <212> TYPE: PRT
332 <213> ORGANISM: Mycobacterium tuberculosis
334 <400> SEQUENCE: 11
335 Met Asn Glu Leu Val Asp Thr Thr Glu Met Tyr Leu Arg Thr Ile Tyr
336   1           5           10           15
338 Asp Leu Glu Glu Glu Gly Val Thr Pro Leu Arg Ala Arg Ile Ala Glu
339           20           25           30
341 Arg Leu Asp Gln Ser Gly Pro Thr Val Ser Gln Thr Val Ser Arg Met
342           35           40           45
344 Glu Arg Asp Gly Leu Leu Arg Val Ala Gly Asp Arg His Leu Glu Leu
345           50           55           60
347 Thr Glu Lys Gly Arg Ala Leu Ala Ile Ala Val Met Arg Lys His Arg
348   65           70           75           80
350 Leu Ala Glu Arg Leu Leu Val Asp Val Ile Gly Leu Pro Trp Glu Glu

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/822,953

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Input Set : A:\Amsc33cn.app
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 2,4,10,14,18,19,22,23,24,25

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/822,953

DATE: 10/22/2004

TIME: 15:33:06

Input Set : A:\Amsc33cn.app

Output Set: N:\CRF4\10222004\J822953.raw

L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0